

technology assessment (HTA) report on the clinical efficacy of occupational therapy for patients with cognitive impairments.

**Methods.** To assess clinical efficacy, a systematic overview was conducted based on published systematic reviews and HTA reports from the last ten years summarizing randomized controlled trials (RCTs) retrieved from four bibliographic databases. The target population included adult patients with cognitive impairments caused by diseases of the CNS, excluding moderate to severe dementia. The intervention studied is occupational therapy compared to no occupational therapy. Outcomes were cognitive abilities, independence, self-determination, health-related quality of life (QoL), and participation in activities of daily living (ADL).

**Results.** Five systematic reviews comprising 1,316 patients were included. There is evidence for a small statistically significant positive effect on “general cognitive function” (10 RCTs, n=470) and on ADL (4 RCTs, n= 405). A non-quantified positive effect was reported on behavior control (1 RCT, n=96), and conflicting evidence on QoL (2 RCTs, n=214). No effect was found for individual components of cognition (5 RCTs, n=202), self-efficacy (1 RCT, n=98) and social participation (2 RCTs, n=194). The level of the evidence was low for all endpoints due to the high risk of bias and small sample sizes.

**Conclusions.** Based on this systematic overview, it cannot be demonstrated but also not ruled out that occupational therapy for cognitive impairment is an effective therapy for adults with cognitive impairments. The evidence is very uncertain due to small effects and high risk of bias, low statistical power, and heterogeneity of interventions and study populations.

## PP100 Improving The Assessment Of Effectiveness For Digital Applications Using The B Statistic: Using WtsWrng As A Case Study

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**Introduction.** The performance of diagnostic health technologies is usually assessed by comparing them with standard care using the kappa statistic. These comparisons are made based on comprehensive clinical information (e.g., anamnesis and complementary tests). However, not all digital applications (DAs) execute over complete information, which leads to work under non-uniform distribution of values. Using kappa statistic in this situation has serious methodological limitations. Kappa assumes that the marginal values are uniformly distributed and highly weights the discordant values when calculating concordance, which underestimates the real effectiveness of DAs (i.e., observed concordance). We aimed to present the application of the B statistic to WtsWrng, a symptom triage DA for individuals.

**Methods.** WtsWrng was used by 382 patients at the emergency department of a hospital. Diagnoses provided by WtsWrng, given

19 symptoms, were compared with those logged in the hospital's electronic clinical records at discharge. Observed concordance was calculated using contingency tables. The concordance using the kappa and B statistics were compared for the 12 most frequent diagnoses at hospital discharge. Sensitivity and specificity were also calculated.

**Results.** Real observed concordance fluctuated from 0.4 to 0.98 for the 12 most frequent diagnoses, eight of which had a concordance greater than 0.8. The results ranged from -0.005 to 0.37 when using the kappa statistic and from 0.36 to 0.99 when using the B statistic. The sensitivity and specificity of WtsWrng were greater than 0.8 for three and eight of the 12 diagnoses, respectively.

**Conclusions.** The results show that the B statistic is closer to the real observed concordance when kappa statistic assumptions are not fulfilled by a DA. Therefore, the B statistic is better suited for assessing the effectiveness of this type of technology. Analysis of WtsWrng using the B statistic showed that its diagnoses were close to those provided by clinicians, which were arrived at using complete clinical information. Moreover, the high specificity of the WtsWrng DA suggests that it is a good tool for determining the appropriate use of healthcare resources.

## PP101 Development Process Of The Economic Guidelines In Tunisia

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**Introduction.** Health technology assessment (HTA) has become a critical support to health policy decision-making. The HTA evaluation process requires transparency, formalized processes, clear timelines, and standardization according to international best practice. Tunisia is establishing an HTA-based decision-making system through the National Authority for Accreditation and Assessment in Healthcare (INEAS) to ensure impartiality and fairness in decision-making, which is important for an emerging democracy. INEAS opted for a participatory approach in developing the national health economic guidelines to better engage healthcare sector stakeholders in the HTA process. We aimed to present the main phases of the process used to develop the Tunisian health economic guidelines, the methodological choices for pharmaco-economic evaluations, and the methodological choices for budget impact analyses.

**Methods.** The different phases of developing the guidelines were listed and reported.

**Results.** The guidelines were developed under a technical cooperation program of the World Health Organization and involved collaboration between the Institut national d'excellence en santé et en services sociaux (INESSS in Quebec, Canada) and INEAS. The first version of the guidelines was drafted following a review of international HTA guidelines and best practice reference books, taking into account the Tunisian healthcare system context. This first draft was discussed in a workshop with the main health system stakeholders and then peer reviewed by international experts. Based